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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,314	08/17/2001	James Kenneth Aragones	RD-28217	2332

6147 7590 03/14/2005

GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
PATENT DOCKET RM. BLDG. K1-4A59
NISKAYUNA, NY 12309

EXAMINER

CRAIG, DWIN M

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,314

Applicant(s)

ARAGONES ET AL.

Examiner

Dwin M Craig

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/9/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. **Claims 1-93** have been presented for Examination. Claims 1-93 have been Examined and rejected.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. **Claims 1-93** are provisionally rejected under the judicially created doctrine of double patenting over **Claims 1-33** of copending Application No. 10/707,656. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

As an example, the Examiner will now map the limitations of **Claims 1, 4 & 5** of Patent Application 09/682,314 with independent **Claim 1** of co-pending Patent Application 10/707,656.

2.1 **Claim 1** of U.S. Patent Application 09/682,314 reads in part, *a system for performing baseline modeling comprising: an engine service database that contains engine data.*

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Which is functionally equivalent to, *an engine baseline modeling component that builds an engine baseline model...and an engine service database containing engine data* as claimed in **Claim 1** of co-pending U.S. Patent Application 10/707,656.

2.2 Claim 1 of U.S. Patent Application 09/682,314 reads in part, *a preprocessor for processing the engine data into a predetermined format*. Which is functionally equivalent to, *a preprocessor for processing the engine data into a predetermined format* as claimed in **Claim 1** of co-pending U.S. Patent Application 10/707,656.

2.3 Claim 4 of U.S. Patent Application 09/682,314 reads, *the preprocessor comprises a data segmenting component that segments the engine data into a plurality of groups*. Which is functionally equivalent to, *wherein the preprocessor includes a data segmenting component that segments the engine data into a plurality of groups* as claimed in **Claim 1** of co-pending U.S. Patent Application 10/707,656.

2.4 Claim 5 of U.S. Patent Application 09/682,314 reads, *wherein the engine baseline model is a regression model*. Which is functionally equivalent to, *using a regression analysis* as claimed in **Claim 1** of co-pending U.S. Patent Application 10/707,656.

2.5 Claim 1 of U.S. Patent Application 09/682,314 reads, *that builds an engine baseline model from preprocessed data, wherein the engine baseline model relates engine performance variables as a function of engine operating conditions*. Which is functionally equivalent to, *wherein the engine baseline model relates engine performance variables as a function of engine operating conditions*, as claimed in **Claim 1** of co-pending U.S. Patent Application 10/707,656.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. **Claims 1-93** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weinstock et al. U.S. Patent 6,223,143** in view of **Aragones et al. U.S. Patent 6,799,154** and in further view of **Keeler et al. U.S. Patent 6,243,696**.

3.1 For example, as regards Independent **Claim 1** and dependent **Claims 2-8** the *Weinstock et al.* reference discloses building/generating a baseline model (**Figure 1 item 18-3, Figure 3 item S20, Figure 16 item S1102, Col. 3 lines 13-22, Col. 9 lines 62-67, Col. 10 lines 1-13, Col. 20 Lines 16-24, Col. 24 lines 22-39**), using an aircraft engine model (**Col. 22 Lines 23-54**), and preprocessing the data (**Col. 10 Lines 46-62**), using a database (**Col. 5 lines 63-67, Col. 6 Lines 1-5**) using regression analysis (**Col. 11 Lines 54-59, Col. 28 Lines 34-37**) and grouping the resulting data (**Col. 21 Lines 5-22**).

However, the *Weinstock et al.* reference does not expressly disclose using a *service history database* or *cleaning* the data.

The *Argones et al.* reference discloses, using a service history database (**Figure 2 Item 40, Col. 6 Lines 34-49, Col. 3 Lines 36-67, Col. 4 Lines 1-6**), performing diagnostics (**Figure 4 item 72**), all for the purpose of maintaining an aircraft engine (**Col. 4 Lines 66-67, Col. 5 Lines 1-19**), it is further noted by the Examiner that this same reference discloses regression testing (**Col. 8 Lines 28-37**). However, it is also noted that both the *Weinstock et al.* and *Argones et al.* references do not expressly disclose *cleaning* data.

The *Keeler et al.* reference discloses *cleaning* data (**Figures 7a-7e, Col. 3 Lines 23-25**), the *Keeler et al.* reference also discloses building/generating a model (**Figure 38 and Figure 39 item 486**), using a database (**Figure 38 items 450 & 452**).

The Examiner notes that, all three cited references are related to creating/building models and manipulating data in a data base to help generate or use that model.

Thus, it would have been obvious, to one of ordinary skill in the model generating art, at the time the invention was made to have used the methods disclosed in the *Argones et al.* and *Keeler et al.* reference(s) in combination with the model building/generation methods of the *Weinstock et al.* reference because, by cleaning the data and then further using a service history database, a generated model can be made more accurate and allow for better risk management (*Argones et al.* Col. 1 Lines 54-61).

Conclusion

4. Claims 1-93 have been Examined and rejected. This Office Action is NON-FINAL.

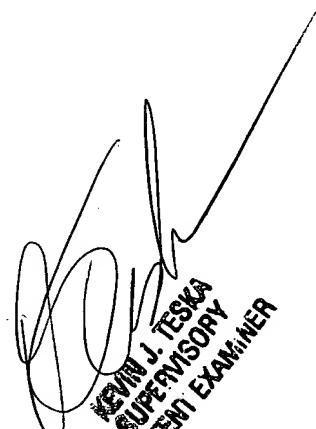
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4.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on (571)272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC



KEVIN J. TESKA
SUPERVISORY
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